

Records of some Non-Lepidopteran Insects from the New Forest Area

By J. C. A. CRAIK*

During my recent residence in the New Forest region of Hampshire (1967-79), I specialised in a modest way in recording the Lepidoptera. However, I was consistently amazed at the richness of the insect fauna in general. Having little knowledge of the detailed classification of other orders, my attention was captured primarily by those species whose individuals are large or spectacular. This note records some of the more bizarre, scarce, or otherwise noteworthy which I came across. Nomenclature is that of Kloet and Hincks, "A Check List of British Insects" 1945, except where otherwise stated (Tabanidae).

HOMOPTERA

Ledra aurita (Linn.). An individual of this species was found at rest during the daytime on a mist-net (erected for the capture and ringing of wild birds) under some oaks in my garden at Ashurst, Hampshire. Not referred to in any of the more popular illustrated field guides, it is large for a British homopteran (body length 15mm, wingspan 28mm) and of very striking appearance, having two large semi-circular plates which project almost vertically from the thorax. (Identified by British Museum.)

Centrotus cornutus (Linn.). A member of this rare species was found during a B.E.N.H.S. meeting at Durlston Head, Dorset, on 10th June 1978. The thorax carries two lateral pointed projections and one long backward-pointing spine which is almost as long as the abdomen. These give the insect an impressively unusual shape and allow it, when at rest on a twig, to mimic a group of thorns.

NEUROPTERA

Raphidia notata Fabr. (Snakefly). A male and a female were found separately in my garden on 17th June 1979. Members of this uncommon genus have a remarkably elongated prothorax.

Osmylus fulvicephalus (Scopoli). Adults of this large and beautiful alder-fly were observed on a few occasions in July 1977 flying between the banks of New Forest streams in the shade of alder trees.

COLEOPTERA

Pterostichus madidus (Fabr.). A specimen of this carabid beetle was observed struggling on the surface of a stream in the New Forest on 22nd May 1977. Before it was swept away by the current, it was rescued and found to have a large worm emerging from its anus. This was identified as *Parachordodes wolterstorffii* (Camerano) (Nematomorpha, Gordioidea). It was placed in a glass tube and, after a few minutes, the worm emerged completely from the beetle. After setting and drying, the worm measured 92mm in length and

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about 1mm in width; the beetle was 16mm long. *Parachorododes* has two host species in its life cycle. Initially it infects the larvae of certain insects, particularly chironomids. These larvae are then eaten by the secondary host, in which the parasite grows for several weeks or months until it is almost mature. Emergence occurs when the host is near water (so that the eggs may be deposited therein), and it is presumably this emergence which I witnessed. The free-living adult phase of the life cycle is spent in water, and sexual maturity is attained very soon after emergence from the secondary host, which is usually a beetle, cockroach, cricket or grasshopper. (Both species were identified by the British Museum (Nat. Hist.))

Dytiscus marginalis (Linn.). An adult female of this large water beetle was caught in my moth trap on 6th July 1979. The larvae are common in neighbouring garden ponds and, if goldfish are kept, are destroyed as dangerous predators. An adult male *D. semisulcatus* Mueller was brought to me by a neighbour from his pond.

Lucanus cervus (Linn.). Four adult stag beetles were encountered during this period, all in June. Two males were (separately) seen in the course of their ungainly crepuscular flight, while one male was found crawling across a tarmac road at midday. My wife saw a female as it was walking across a pavement in Ashurst in the daytime. Before she could pick it up, an irate woman pedestrian stamped it to death, muttering righteously to her small child, "Look at that dirty, disgusting creature".

Prionus coriarius (Linn.). This large longhorn beetle almost rivals the stag beetle in size and splendour. Two specimens were caught, on 11th August 1978 and 8th August 1979, both severely entangled in mist-nets in the garden. It was a lengthy and difficult operation to extract them intact and without being bitten by their large powerful mandibles.

HYMENOPTERA

Urocerus gigas (Linn.). An exceptionally large female Giant Woodwasp (length including ovipositor 45mm, wingspan 60mm) was caught in a warehouse in Eastleigh, Hampshire in August 1978. Another female, caught in Devon in 1974, had 30 and 43mm respectively as these measurements, illustrating the considerable variation in size that is so characteristic of the adults of woodboring/woodeating insects.

Vespa crabro (Linn.). The hornet is a fairly common species in the New Forest area. The adults are apparently active both by day and by night, being regular visitors to light-traps and occasionally appearing at lighted windows at night. In 1978, 353 hornets were trapped in the Robinson 125-watt moth trap in my garden, including 2 queens and 14 drones. Workers continued to be caught until 5th November. Two aspects of their appearance in moth traps are worthy of mention. Hornets caught in a moth trap may kill or mutilate numbers of moths, often neatly severing all four wings and separating the

abdomen from the thorax. In 1978, moths of 29 species were attacked in this way, 72 individuals being killed and a further 4 mutilated but left alive. The hornets trapped on any particular night usually appeared exhausted in the morning. Many became incapable of flight if they were not released before about midday, and all died if not released by evening. It was suggested to me by Colin Pratt that this phenomenon might be due to dehydration. In 1979, I carried out a preliminary test of this hypothesis by placing a shallow dish of water in the trap one evening. Only three hornets were caught that night; two were unable to fly the next morning, while one just managed to fly away. Thus the presence of water did not alleviate the condition. Possibly the apparent exhaustion and death are caused by the body temperature falling below that of the nest and below that maintained by normal activity. Enforced idleness in the trap might allow the hornets' temperature to fall to that of the environment during the night. Hornets would normally be unaccustomed to such cooling. (It is well known that flight muscles of large moths are maintained at a temperature above that of the environment during flight.) Other possible explanations are that the hornets may have been poisoned by having eaten certain moths, or that they may be dependent upon a pheromone originating from the queen or from the nest.

DIPTERA

Ctenophora ornata (Meigen). A male of this very rare Tipulid fly came to my portable (Heath) m.v. light trap at Woosons Hill, New Forest, at 2 a.m. on 26th July 1979. This species provides a classic example of aposematic (warning) colouration, having its abdomen strikingly banded in yellow, orange, brown and black. (Identified by British Museum.)

Tabanidae (Identification and nomenclature from R.E.S. Handbook for the Identification of British Insects, vol. IX, part 4.)

Tabanus sudeticus (Verrall) and *T. bovinus* (Linn.). Considerable numbers of these impressively large bloodsucking species (length 22-24mm, wingspan 44-47mm, from 7 set specimens) were caught in Ashurst Hospital (a geriatric hospital) in July and August of 1978 and 1979. Together with larger numbers of other smaller species of Tabanidae, they were observed to be feeding on the blood of the elderly residents of the hospital. (Possibly this was not their only source of food, since there were cattle and ponies in nearby fields.) Many specimens came into my possession, as my wife worked in the hospital during this period and assisted in spraying operations to control the flies. Reports suggested that the appearance of the flies in sufficient numbers to cause a nuisance was an annual event. The following species were identified from specimens found inside the hospital wards: *Chrysops pictus* (Meigen), *Hybomitra distinguenda* (Verrall), *Atylotus fulvus* (Meigen), *Tabanus sudeticus* (Verrall), *T. bovinus* (Linn.), *T. miki* (Brauer), *T. bromius* (Linn.). In addition to this rich source

of Tabanids, the following were caught in the conservatory attached to my house at Ashurst: *Chrysops caecutiens* (Linn.) (1 specimen) and *Tabanus autumnalis* (Linn.) (3 specimens). *Volucella zonaria* (Poda). This large hoverfly species provides another good example of warning colouration, having black and yellow bands on the abdomen which give it a wasp-like appearance. Three individuals were collected in this period, all in or near Southampton, including one which was brought to me in a matchbox by a friend who was convinced that it was capable of stinging him. Another interesting example of the efficiency of this mimicry of bees and wasps by hoverflies was seen recently in an advertisement, shown many times on television, which encouraged viewers to save with a particular building society or bank (I forget which). It purported to show a bee on a flower, industriously collecting and saving nectar and pollen. In fact, unknown to the creators of the advertisement, the picture was not of a bee, but of a rather less exemplary hoverfly. However, most of the viewers were doubtless also deceived.

HIPPOBOSCIDAE

Hippoboscidae (Specialised bloodsucking dipteran parasites of birds and mammals.)

The Forest Fly, *Hippobosca equina* (Linn.), was observed frequently on New Forest ponies in July and August, and could be obtained by sweeping the ground vegetation in infested areas (or picked from our dog after walking in such areas). Of the avian parasites, *Ornithomyia avicularia* (Linn.) was frequently observed during bird-ringing operations in summer; it was found on a wide range of species, including Green Woodpecker, Tawny Owl and Blackcap. The more highly specialised, flightless *Stenopteryx hirundinis* (Linn.) was obtained from House Martins on several occasions. These parasites of birds are mentioned here because, although common and widespread, they are unlikely to be encountered by the entomologist unless he or she handles wild birds or collects from birds' nests.

THE CLOUDED YELLOW: *COLIAS CROCEUS* GEOF. IN CORNWALL. — On 27th August 1980, while walking behind the cliff-tops at Landsend, I disturbed into flight a number of these butterflies which were lying low in dull weather conditions. — BRIAN CHESNEY, 83, Tylecroft Road, Norbury, London SW16 4BJ.

THE WHITE-SPECK WAINSCOT: *MYTHIMNA ALBIPUNCTA* D. & S. IN HAMPSHIRE. — The autumn of 1980 has been very poor for migrant lepidoptera, with even the commoner migrant species appearing in very small numbers. It was therefore a pleasant surprise when I took a specimen of *albipuncta* at m.v. at Southsea on 23rd September. — Dr. J. R. LANGMAID, 38, Cumberland Court, Festing Road, Southsea, Hants.